



October 21, 2016

Public Health Preparedness and Situational Awareness Report: #2016:41 Reporting for the week ending 10/15/16 (MMWR Week #41)

CURRENT HOMELAND SECURITY THREAT LEVELS

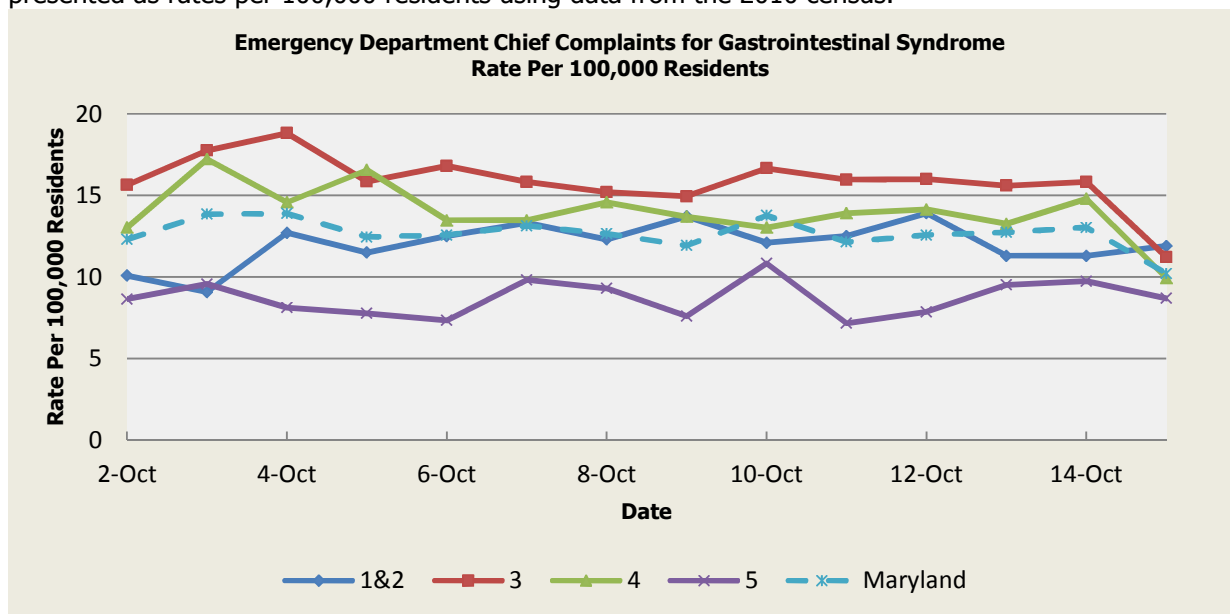
National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

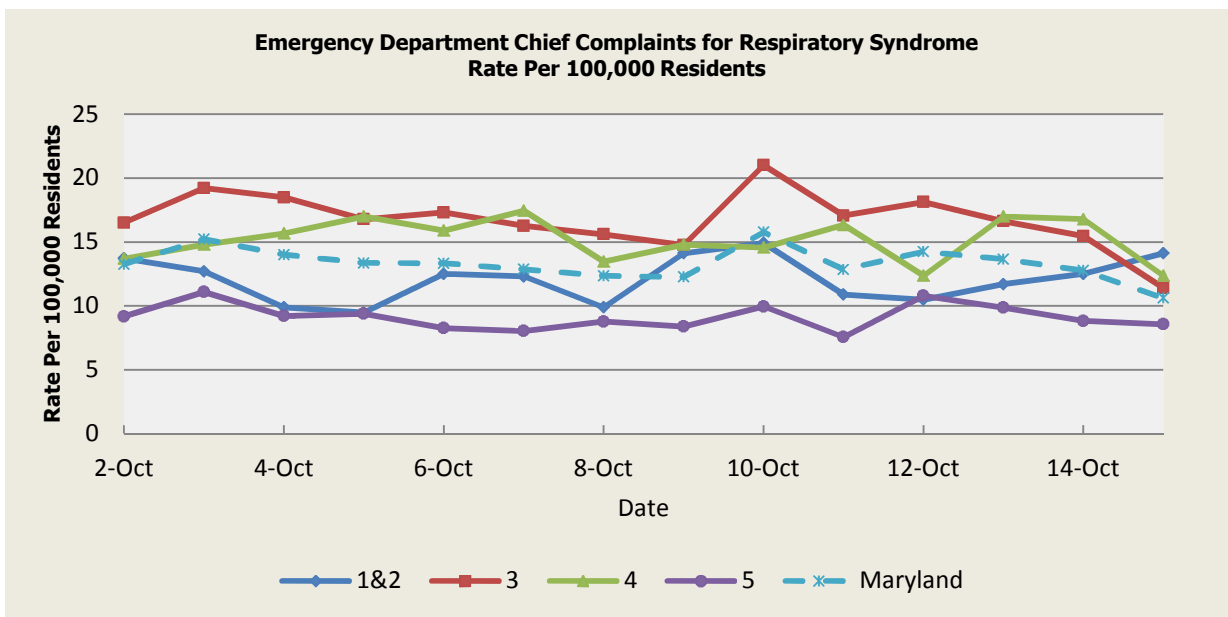
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census.



There were no gastroenteritis/ foodborne outbreaks reported this week.

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.94	14.88	15.42	10.31	13.01
Median Rate*	12.70	14.47	14.80	10.17	12.75

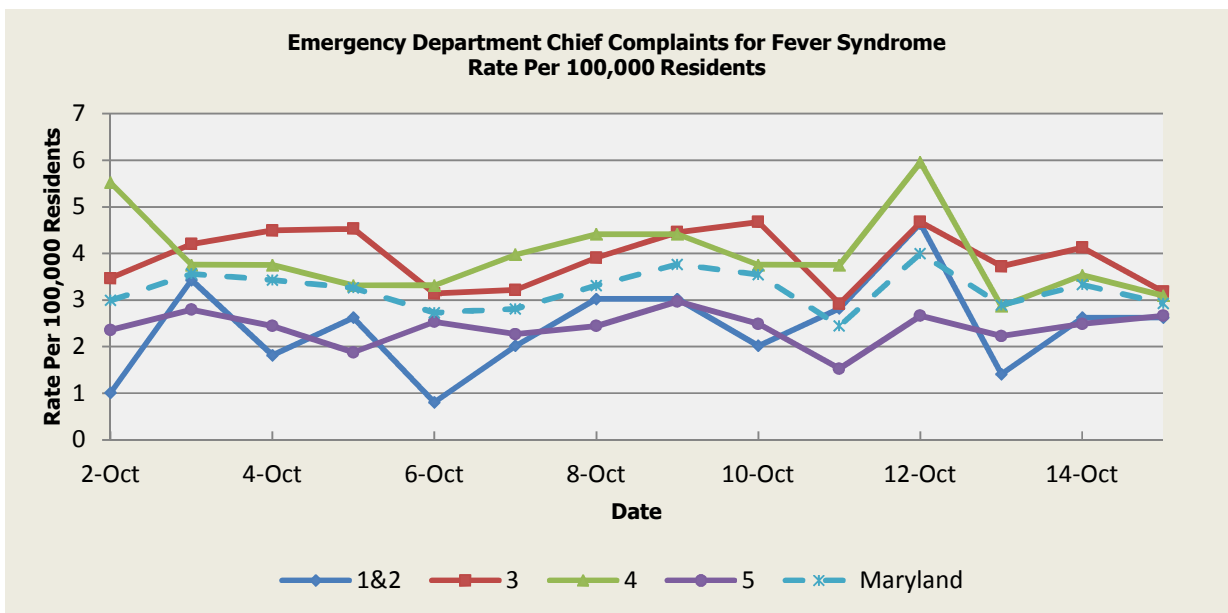
* Per 100,000 Residents



There was one (1) respiratory illness outbreak reported this week: 1 outbreak of Pneumonia associated with a Nursing Home (Region 5).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.99	14.12	14.04	9.94	12.34
Median Rate*	11.70	13.37	13.69	9.52	11.79

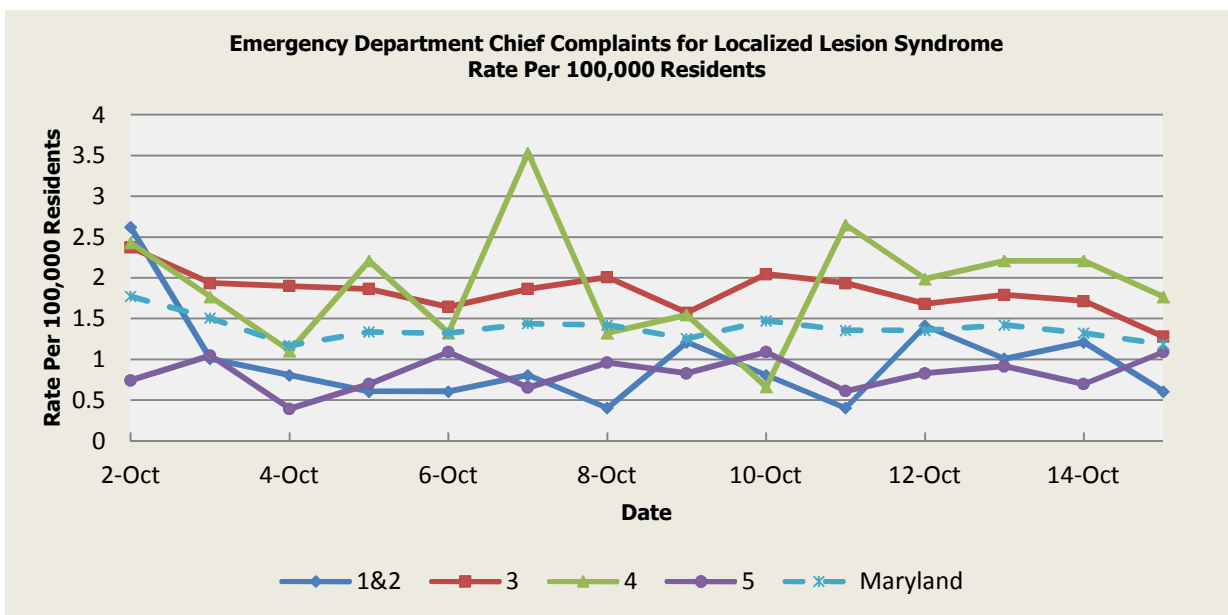
* Per 100,000 Residents



There were no fever outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.07	3.80	3.93	3.09	3.48
Median Rate*	3.02	3.62	3.75	2.97	3.35

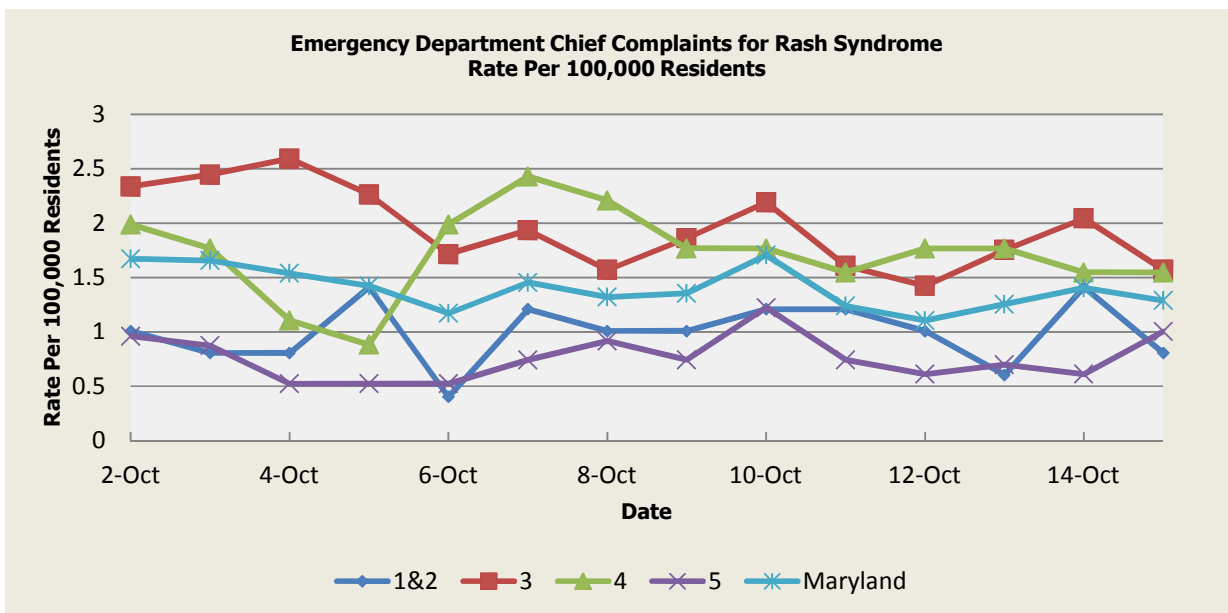
Per 100,000 Residents



There were no localized lesion outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.07	1.91	2.03	0.98	1.49
Median Rate*	1.01	1.86	1.99	0.92	1.44

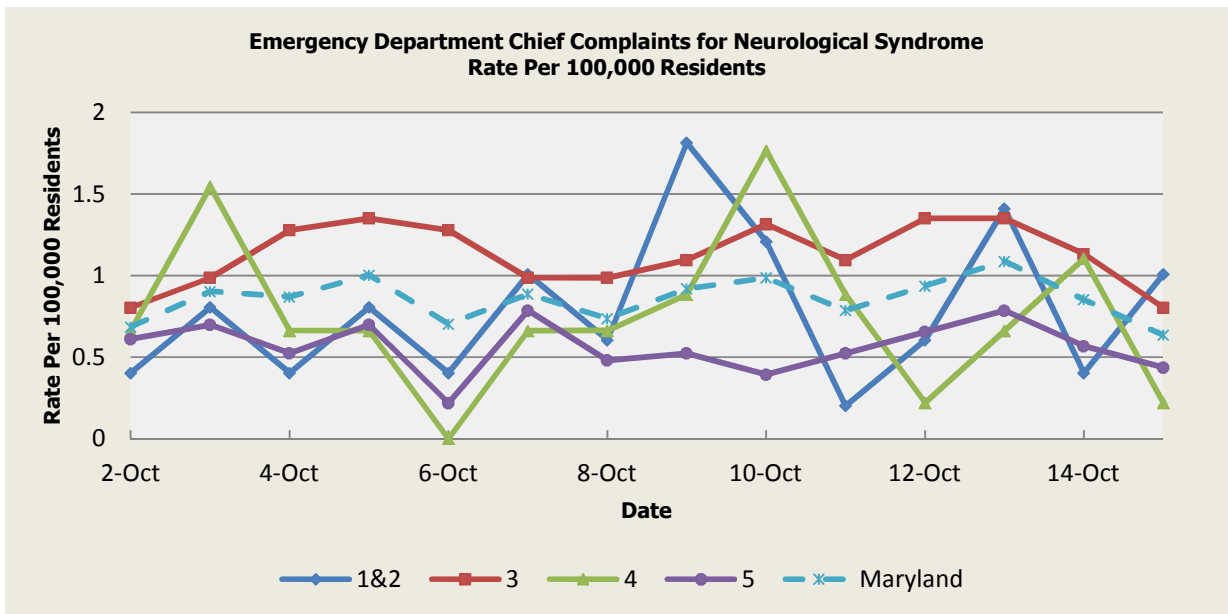
* Per 100,000 Residents



There was one (1) rash illness outbreak reported this week: 1 outbreak of HAND, FOOT, AND MOUTH DISEASE associated with a Daycare Center (Region 4).

Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.30	1.75	1.75	1.04	1.44
Median Rate*	1.21	1.68	1.77	1.00	1.39

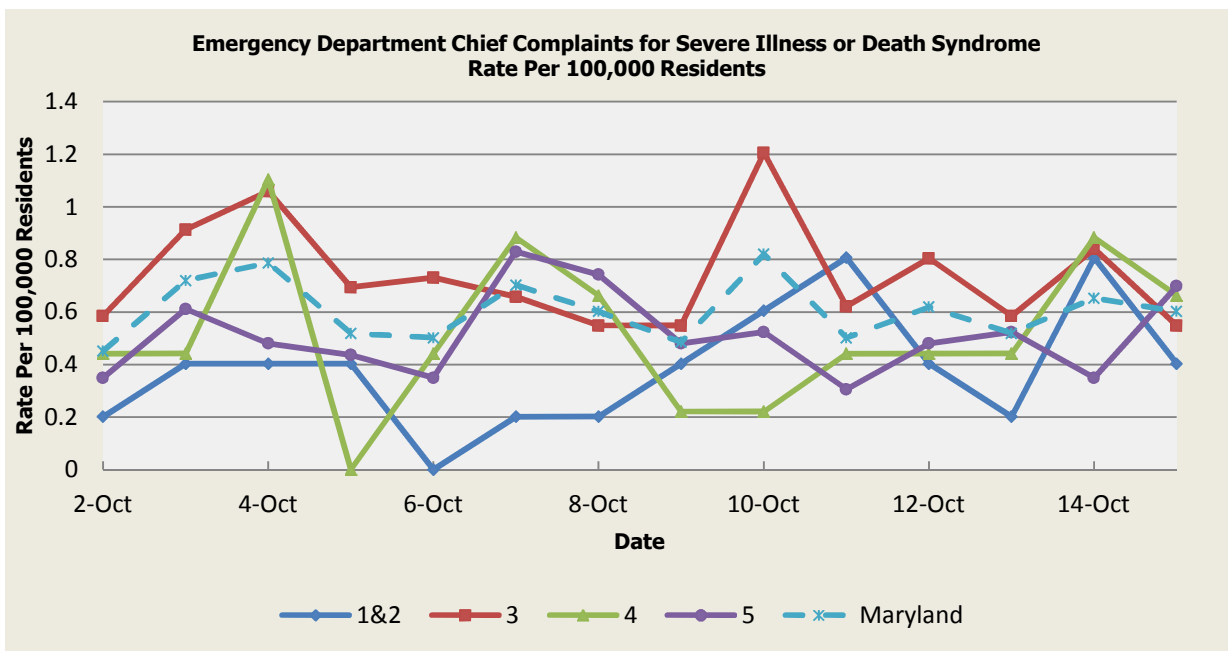
* Per 100,000 Residents



There were no neurological syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.73	0.65	0.48	0.62
Median Rate*	0.60	0.66	0.66	0.44	0.57

* Per 100,000 Residents

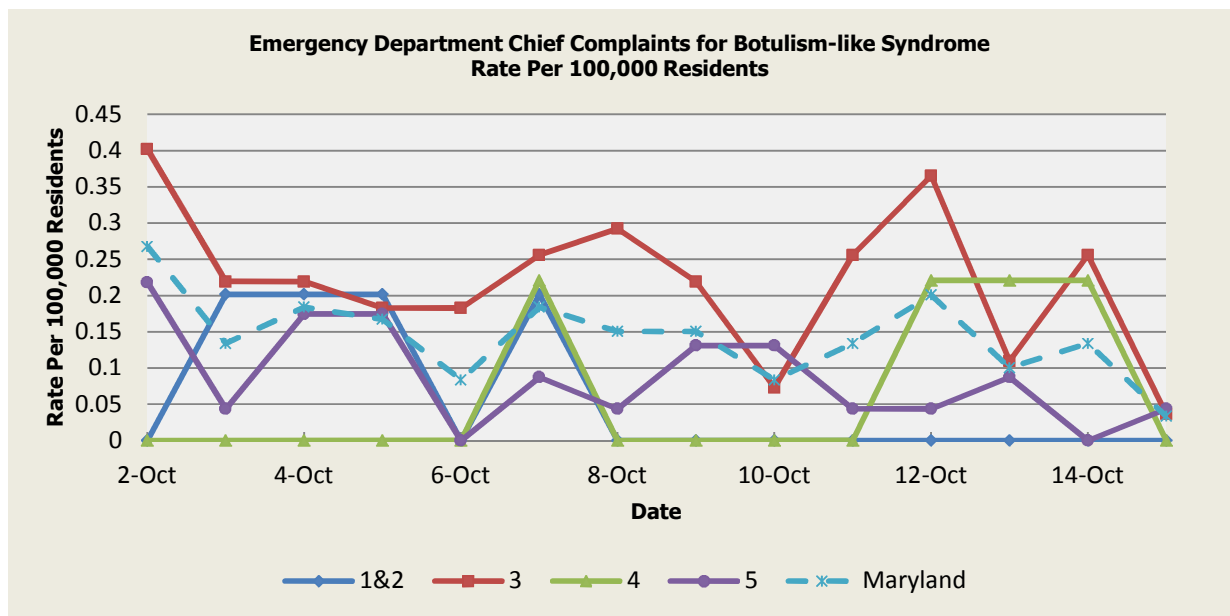


There were no severe illness or death outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.70	0.95	0.84	0.44	0.73
Median Rate*	0.60	0.91	0.88	0.44	0.72

* Per 100,000 Residents

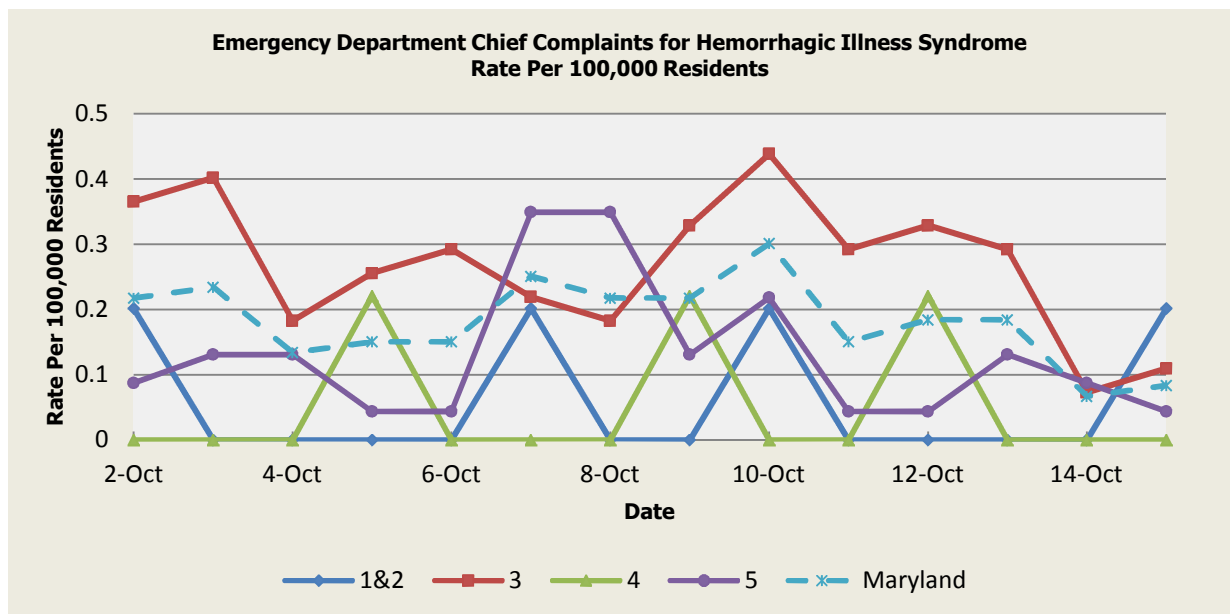
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 10/2 (Regions 3,5), 10/3 (Regions 1&2,3), 10/4 (Regions 1&2,3,5), 10/5 (Regions 1&2,3,5), 10/6 (Region 3), 10/7 (Regions 1&2,3,4,5), 10/8 (Region 3), 10/9 (Regions 3,5), 10/10 (Region 5), 10/11 (Region 3), 10/12 (Regions 3,4), 10/13 (Region 4), and 10/14 (Regions 3,4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.08	0.04	0.05	0.06
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents

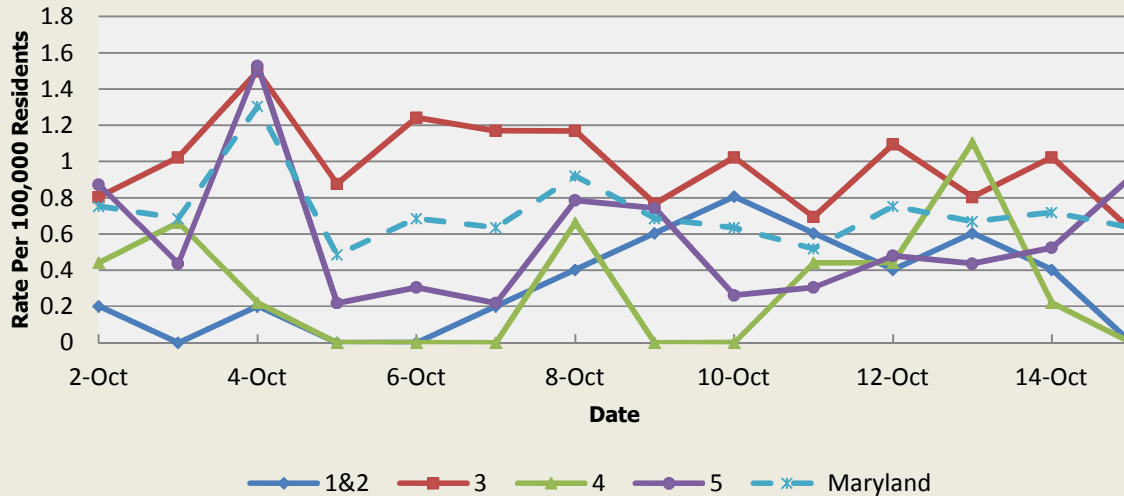


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 10/2 (Regions 1&2,3), 10/3 (Region 3), 10/5 (Regions 3,4), 10/6 (Region 3), 10/7 (Regions 1&2,5), 10/8 (Region 5), 10/9 (Regions 3,4), 10/10 (Regions 1&2,3,5), 10/11 (Region 3), 10/12 (Regions 3,4), 10/13 (Region 3) and 10/15 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.11	0.03	0.08	0.08
Median Rate*	0.00	0.04	0.00	0.04	0.03

* Per 100,000 Residents

**Emergency Department Chief Complaints for Lymphadenitis Syndrome
Rate Per 100,000 Residents**



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 10/3 (Region 3), 10/4 (Regions 3,5), 10/6 (Region 3), 10/7 (Region 3), 10/8 (Region 3), 10/10 (Regions 1&2,3), 10/12 (Region 3), 10/13 (Region 4), and 10/14 (Region 3). These increases are not known to be associated with any outbreaks.

**Lymphadenitis Syndrome Baseline Data
January 1, 2010 - Present**

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.50	0.34	0.51	0.38
Median Rate*	0.20	0.37	0.22	0.26	0.32

* Per 100,000 Residents

MARYLAND REPORTABLE DISEASE SURVEILLANCE

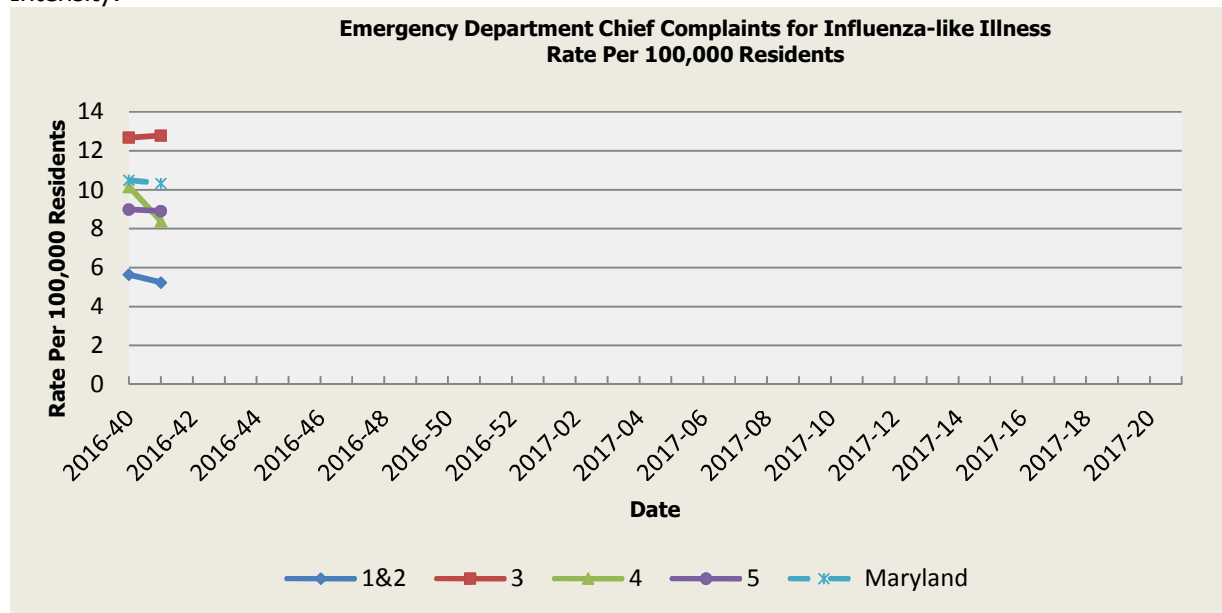
Condition	Counts of Reported Cases†					
	October			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Aseptic meningitis	8	22.2	23	273	369.2	376
Meningococcal disease	0	0.4	0	3	6.4	5
Measles	0	0.2	0	4	4.2	3
Mumps	0	0.6	0	16	36.6	12
Rubella	0	0	0	1	2.4	2
Pertussis	9	13.2	13	172	237.8	291
Foodborne Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Salmonellosis	12	41.8	42	664	781	785
Shigellosis	3	7.6	6	108	151	181
Campylobacteriosis	18	27.8	26	581	573.6	566
Shiga toxin-producing Escherichia coli (STEC)	7	5.4	5	140	102.8	95
Listeriosis	1	1.2	1	18	13.8	15
Arboviral Diseases	2016	Mean*	Median*	2016	Mean*	Median*
West Nile Fever	0	0.4	0	2	11.8	10
Lyme Disease	17	53.8	55	1506	1296.2	1393
Emerging Infectious Diseases	2016	Mean*	Median*	2016	Mean*	Median*
Chikungunya	0	1.2	0	5	13	0
Dengue Fever	1	1	1	35	13.8	14
Zika Virus***	0	0	0	110	0.2	0
Other	2016	Mean*	Median*	2016	Mean*	Median*
Legionellosis	8	9.6	9	124	138.2	141

† Counts are subject to change *Timeframe of 2011-2015 **Includes January through current month

*** As of October 21, 2016, the total Maryland Confirmed Zika Virus Infections is 103.

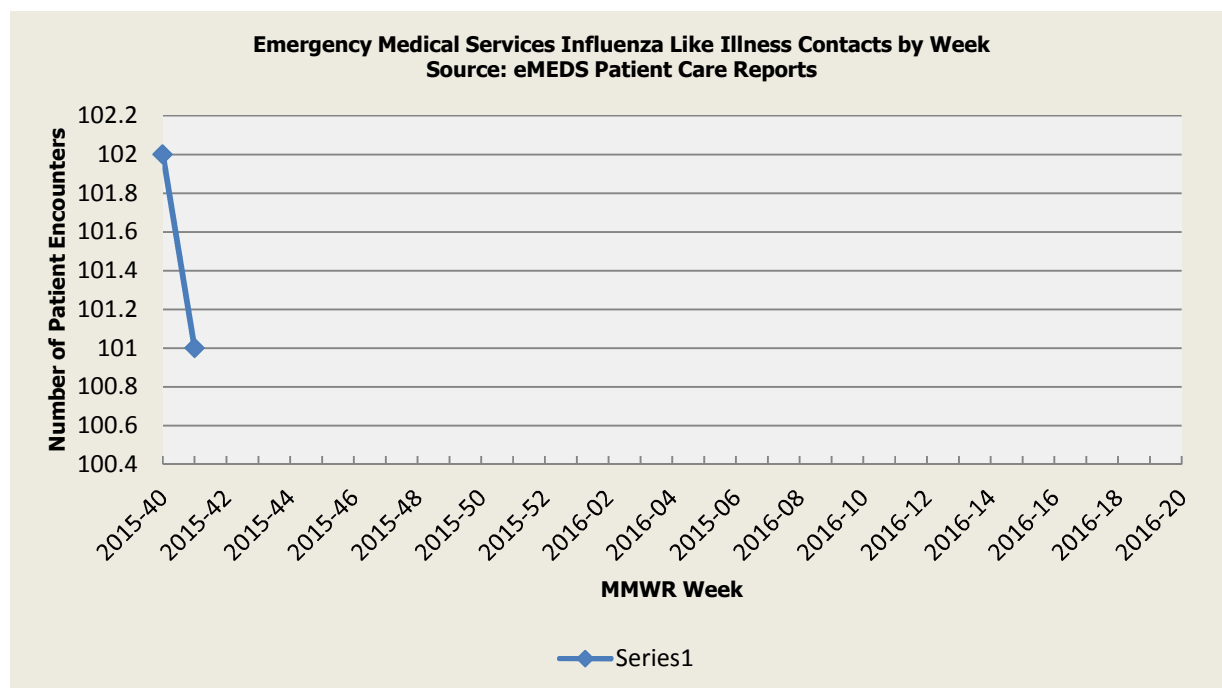
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 41 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 41 was: Minimal Geographic Spread with Sporadic Intensity.

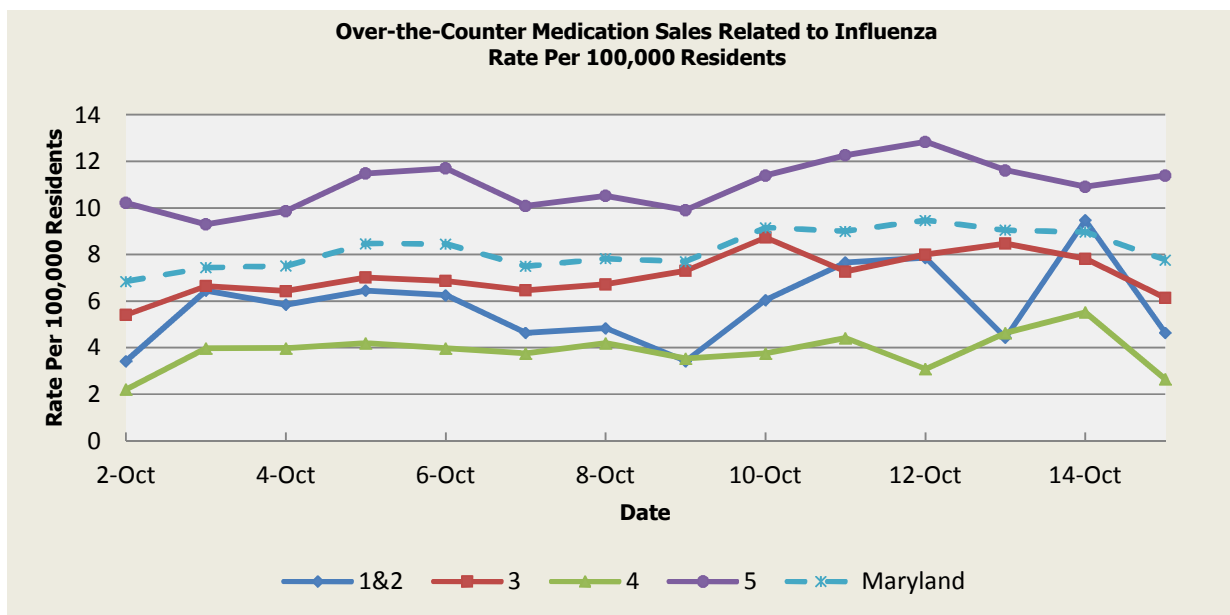


Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	9.26	11.58	10.78	10.43	10.88
Median Rate*	7.66	8.99	9.05	8.03	8.72

* Per 100,000 Residents



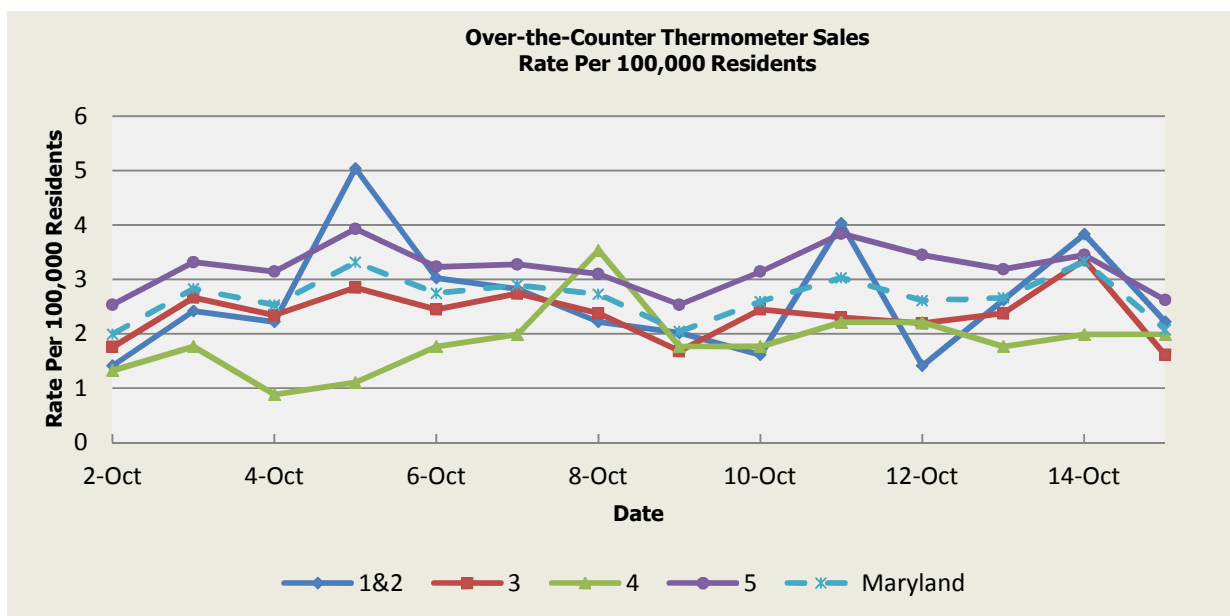
Disclaimer on eMEDS flu related data: This data is based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. This data is reported for trending purposes only.



There was not an appreciable increase above baseline in the rate of OTC medication sales this week.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.86	4.69	2.60	8.21	5.79
Median Rate*	2.82	3.98	2.21	7.60	5.19

* Per 100,000 Residents



There was not an appreciable increase above baseline in the rate of OTC thermometer sales this week.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.48	3.30	2.54	4.50	3.72
Median Rate*	3.23	3.07	2.43	4.10	3.46

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of October 3, 2016, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 856, of which 452 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

Avian Influenza:

H5N8 (RUSSIA): 20 Oct 2016, The zoo in the Indian capital Delhi has been temporarily closed after at least 9 birds died of suspected bird flu. Zoo officials have said tests on 2 of the carcasses had confirmed H5N1 avian influenza. The other bodies have also been sent for testing. Read More: <http://www.promedmail.org/post/4573601>

NATIONAL DISEASE REPORTS

LEGIONELLOSIS (NEW YORK): 16 Oct 2016, The [New York] State Health Department said [on Fri 14 Oct 2016] that it is investigating a cluster of 8 cases of Legionnaires' disease around Eastern Niagara Hospital in Lockport [New York State]. The investigation, which also includes the Niagara County Health Department, began after the hospital, in a state-mandated test, discovered that a cooling tower on its building contained water that tested positive for greater-than-permitted levels of legionella, the bacterium that causes the pneumonia-like disease. Read More: <http://www.promedmail.org/post/4562851>

SALMONELLOSIS (ARIZONA): 19 Oct 2016, The Maricopa County Department of Public Health has released a PDF report on their investigation into a *Salmonella Javiana* outbreak that sickened at least 50 people in July and August 2016. There are 40 confirmed cases and 10 probable cases. A total of 33 (66 percent) of the cases reported eating at Restaurant A, with exposure dates from 16 Jul 2016 to 18 Aug 2016. As many as 40 other restaurants or fast food establishments were reportedly patronized by patients. Up to 3 had more than 1 person reporting eating there within the week before illness onset with 2 cases each. Read more: <http://www.promedmail.org/post/4570858>

TULAREMIA (TEXAS): 20 Oct 2016, The Wichita Falls Health Department is investigating how a man got a potentially deadly bacterial disease. A man in Wichita Falls was recently diagnosed with tularemia - also known as Rabbit Fever. Health officials say it's a rare bacterial infection for this area that comes from tick and deer fly bites, skin contact with infected animals like rabbits and rats, and ingesting contaminated water. Read more: <http://www.promedmail.org/post/4572972>

INTERNATIONAL DISEASE REPORTS

LISTERIOSIS (CANADA): 16 Oct 2016, Vancouver Coastal Health [VCH] is warning customers not to consume any produce or ready-to-eat foods made in-house at Foody World, at 3000 Sexsmith Road in Richmond, due to possible listeria contamination. So far at least 6 people have been hospitalized due to the illness. Read more: <http://www.promedmail.org/post/4563526>

FOODBORNE ILLNESS (PHILIPPINES): 18 Oct 2016, The Bacolod City Health Office (CHO) declared a "food and waterborne diseases outbreak" in Barangay Handumanan after 145 pupils of Handumanan Elementary School-I were brought to different hospitals in the city since Fri 14 Oct 2016, due to suspected food poisoning. Read More: <http://www.promedmail.org/post/4566145>

INVASIVE MOSQUITO (UNITED KINGDOM): 18 Oct 2016, Eggs of an invasive mosquito species, *Aedes albopictus*, were collected for the 1st time in September 2016 in the United Kingdom. The species was confirmed on 30 Sep [2016], using a variety of morphological and molecular techniques. Despite extensive mosquito trapping at UK sea and airports, imported tyre companies, and motorway service stations close to the ferry ports and Eurotunnel, this is the 1st time that this species has been detected in the UK. Read more: <http://www.promedmail.org/post/4568559>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmmh.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the DHMH website:
<http://phpa.dhmmh.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS):
<http://flusurvey.dhmmh.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Fax: 410-333-5000

Anikah H. Salim, MPH, CPH
Biosurveillance Epidemiologist
Office: 410-767-2074
Email: Anikah.Salim@maryland.gov

Jessica Goodell, MPH
Temporary Epidemiology Field Assignee, CDC
Office: 410-767-6745
Email: Jessica.Goodell@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

